

## EAST Search History

## EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	8	"6601456"	US-PGPUB; USPAT; USOCR	OR	ON	2008/10/16 13:45
S2	3	"6442534"	US-PGPUB; USPAT; USOCR	OR	ON	2008/10/16 13:51
S3	8399	resonan\$3 with test\$3	US-PGPUB; USPAT; USOCR	OR	ON	2008/10/22 17:03
S4	1166	(702/42,56,141).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/22 17:04
S5	1821	(73/808,789,798,579).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/22 17:05
S6	1140	(73/849,788,794,795,806).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2008/10/22 17:05
S7	273	S3 and (S4 S5 S6)	US-PGPUB; USPAT; USOCR	OR	ON	2008/10/22 17:05
S8	17	S3 and (S4 S5 S6) and (piezoelectric with actuat\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2008/10/22 17:22
S9	5	S3 and (S4 S5 S6) and (piezoelectric with actuat\$3) and (cycl\$3 with load \$3 with specimen\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2008/10/22 17:23
S10	0	S3 and (S4 S5 S6) and (piezoelectric with actuat\$3) and (cycl\$3 with load \$3 with specimen\$1) and (frequenc\$3 with waveform\$1) and (recipr\$3 with frequenc\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2008/10/22 17:24
S11	2	(piezoelectric with actuat\$3) and (cycl \$3 with load\$3 with specimen\$1) and (frequenc\$3 with waveform\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2008/10/22 17:38
S12	2	S11 and (S4 S5 S6)	US-PGPUB; USPAT; USOCR	OR	ON	2008/10/22 17:41
S13	13	("4112746"   "4478086"   "5079955"   "5719339"   "5758970"   "5877432"   "5883311"   "5952581"   "6023980"). PN. OR ("6732591").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2008/10/22 17:41
S14	2	("2002/0017144").URPN.	USPAT	OR	ON	2008/10/22 17:43
S15	2	S3 and S11	US-PGPUB; USPAT; USOCR	OR	ON	2008/10/22 17:43
S16	1264	(702/42,56,141).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/04/07 14:05
S18	2810	(73/808,789,798,579,).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/04/07 14:05

S19	1679	(73/849,788,794,795,806).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/04/07 14:05
S20	2	(piezoelectric with actuat\$3) and (cycl\$3 with load\$3 with specimen\$1) and (frequenc\$3 with waveform\$1 )	US-PGPUB; USPAT; USOCR	OR	ON	2009/04/07 14:05
S21	65	S16 and S17	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/07 14:06
S22	0	S20 and S21	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/07 14:06
S23	2	(S16 S17) and S20	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/07 14:06
S25	0	S19 and S20	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/04/07 14:07
S26	5094	(702/42,56,141,188-190).CCLS.	US-PGPUB; USPAT; USOCR; EPO	OR	OFF	2009/12/29 16:40
S27	0	(piezoelectric with actuat\$3) and (cycl\$3 with load\$3 with specimen\$1) and (frequenc\$3 with waveform\$1) and (root with end\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 16:40
S28	0	(piezoelectric with actuat\$3) and (cycl\$3 with load\$3 with specimen\$1) and (frequenc\$3 with waveform\$1) and (root with end\$3) and (longitud\$3 with ax\$3) and (mount\$3 with rigid\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 16:42
S29	0	(piezoelectric with actuat\$3) and (cycl\$3 with load\$3 with specimen\$1) and (frequenc\$3 with waveform\$1) and (root with end\$3) and (longitud\$3 with ax\$3) and (mount\$3 with rigid\$3) and (reciprocat\$3 with frequenc\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 16:53
S30	0	(piezoelectric with actuat\$3) same (cycl\$3 with load\$3 with specimen\$1) same (frequenc\$3 with waveform\$1) same (root with end\$3) same (longitud\$3 with ax\$3) same (mount\$3 with rigid\$3) same (reciprocat\$3 with frequenc\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 16:54
S31	0	S27 and S26	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 16:54
S32	1	("7233476").PN.	US-PGPUB; USPAT; USOCR; EPO	OR	OFF	2009/12/29 16:58

S33	1	("6,442,534").PN.	US-PGPUB; USPAT; USOCR; EPO	OR	OFF	2009/12/29 16:59
S34	11	("4362978"   "5159547"   "5394678"   "5497063"   "5557154"   "5566065"   "5570282"   "5822740"   "5867456"). PN. OR ("6442534").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:01
S40	2	(piezoelectric with actuat\$3) and (cycl \$3 with load\$3 with specimen\$1) and (frequenc\$3 with waveform\$1 )	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:11
S41	5000	(702/42,56,141,188-190).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2009/12/29 17:11
S42	1	(reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (specimen with mov\$3) and (mass with relat\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:12
S43	1	(reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (specimen with mov\$3) and (mass with relat\$3) and (wind with turbine with blade\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:12
S44	0	(piezoelectric with actuat\$3) same (cycl\$3 with load\$3 with specimen\$1) same (frequenc\$3 with waveform\$1) same (root with end\$3) same (longitud \$3 with ax\$3) same (mount\$3 with rigid\$3) same (reciprocat\$3 with frequenc\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:12
S45	0	S41 and S42	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:12
S46	0	(reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (specimen with mov\$3) and (mass with relat\$3) and (displacement with tip\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:12
S47	0	(reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (specimen with mov\$3) and (mass with relat\$3) and (displacement with tip\$3) and (vibrat \$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:13
S48	0	(reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (specimen with mov\$3 with mass) and (mass with relat\$3) and (displacement with tip\$3) and (vibrat\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:13
S49	0	(reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (specimen with mov\$3 with mass) and (mass with relat\$3) and (displacement with tip\$3) and (vibrat\$3) and (load with actuat\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:13
S50	0	(reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (specimen with mov\$3 with mass) and (mass with relat\$3) and (displacement with tip\$3) and (vibrat\$3) and (load with actuat\$3 with transvers\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:13

S51	60	("20020126091"   "2972140"   "3157853"   "3220121"   "3497668"   "3517446"   "3623064"   "3902687"   "3903614"   "3911416"   "4127752"   "4160508"   "4236325"   "4262549"   "4333070"   "4464117"   "4484191"   "4513235"   "4581491"   "4599070"   "4708656"   "4713007"   "4794392"   "4885565"   "4891764"   "4930770"   "4934694"   "5019761"   "5022384"   "5022407"   "5035242"   "5038089"   "5078152"   "5165897"   "5175459"   "5186695"   "5212473"   "5240417"   "5271290"   "5275174"   "5283970"   "5299810"   "5309140"   "5334027"   "5436622"   "5437607"   "5466213"   "5547382"   "5575761"   "5690582"   "5766016"   "5785630"   "6111577"   "6160489"   "6422941").PN. OR ("7233476").URPN.	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:14
S52	0	S50 and S41	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:14
S53	0	S51 and S41	US-PGPUB; USPAT; USOCR	OR	ON	2009/12/29 17:14
S57	11907	(702/42,56,141,179-189).CCLS.	US-PGPUB; USPAT; USOCR	OR	OFF	2010/07/15 19:01
S58	2495	(702/43-44,58-62).CCLS.	US-PGPUB; USPAT; USOCR; EPO	OR	OFF	2010/07/15 19:03
S59	3001	(702/116-122).CCLS.	US-PGPUB; USPAT; USOCR; EPO	OR	OFF	2010/07/15 19:03
S60	1	(reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (specimen with mov\$3) and (mass with relat\$3) and (wind with turbine with blade\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:04
S61	39	(actuat\$3 with reciproc\$3) and (specimen with (mass\$3 weigh\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:11
S62	0	(S57 S58 S59) and S61	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:20
S63	0	S61 and S57	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:20
S64	1	(actuat\$3 with reciproc\$3) and (specimen with (mass\$3 weigh\$3)) and (wind with (turbine blade\$1))	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:29
S65	0	(actuat\$3 with reciproc\$3) and (specimen with (mass\$3 weigh\$3)) and (wind with (turbine blade\$1)) and (displac\$3 with path\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:31
S66	0	S64 and (S57 S58 S59)	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:31
S67	13	((walter with musial) (white with darris)).in.	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:31
S69	0	S67 and (S57 S58 S59)	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:32
S70	1	S67 and S61	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:32
S71	64927	(resonan\$3 with system\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:32

S72	1759	(resonan\$3 with system\$1).ti.	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:32
S73	6	S72 and (reciproca\$4 with frequenc \$3) and (longitudinal with (axis axes))	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:33
S74	5	S73 and (mass\$3 weigh\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:34
S75	2	S73 and (mass\$3 weigh\$3) and (spac \$3 with apart\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:35
S76	0	S73 and (mass\$3 weigh\$3) and (spac \$3 with apart\$3) and (linear\$3 with displacement with path\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:35
S77	0	(reciprocat\$3 with frequenc\$3) and specimen\$1 and actuat\$3 and (mass \$3 weigh\$3) and (spac\$3 with apart \$3) and (linear\$3 with displacement with path\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:36
S78	1	("20020038987").PN.	US-PGPUB; USPAT; USOCR; EPO	OR	OFF	2010/07/15 19:38
S79	0	((reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (specimen with mov\$3 with mass) and (mass with relat\$3) and (displacement with tip\$3) and (vibrat\$3) and (load with actuat\$3 with transvers\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:38
S80	0	S79 and (S57 S58 S59 )	US-PGPUB; USPAT; USOCR	OR	ON	2010/07/15 19:39
S85	17771	(702/42-44,56,58-62,116-122,141,179- 189).CCLS.	US-PGPUB; USPAT; USOCR; EPO	OR	OFF	2011/01/24 12:31
S86	7	("4924706"   "4955269"   "5290148"   "5445027"   "6082198"   "6102664"   "6240792").PN.	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:01
S87	41	(actuat\$3 with reciproc\$3) and (specimen with (mass\$3 weigh\$3))	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:06
S88	0	(actuat\$3 with reciproc\$3) and (specimen with (mass\$3 weigh\$3)) and (vibrat\$3 with sinusoidal\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:06
S90	0	(actuat\$3 with reciproc\$3) and (specimen with (mass\$3 weigh\$3)) and (vibrat\$3 with vary\$3)	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:07
S91	2	(actuat\$3 with reciproc\$3) and (specimen with (mass\$3 weigh\$3)) and (perpendicular\$3 with displacement)	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:08
S92	0	S91 and S85	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:08
S93	19	(reciprocat\$3 with (mass\$3 weight\$1)) and ((perpendicular\$1 ninety) with angular\$3) and (vibrat\$3 and actuat \$3)	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:09
S94	3	(reciprocat\$3 with (mass\$3 weight\$1)) and ((perpendicular\$1 ninety) with angular\$3) and (vibrat\$3 and actuat \$3) and (contact\$3) and (displacement with path)	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:11

S95	3	(reciprocat\$3 with (mass\$3 weight\$1)) and ((perpendicular\$1 ninety) with angular\$3) and (vibrat\$3 and actuat\$3) and (contact\$3) and (resonan\$3 with frequency)	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:12
S96	3	(reciprocat\$3 with (mass\$3 weight\$1)) and ((perpendicular\$1 ninety) with angular\$3) and (vibrat\$3 and actuat\$3) and (contact\$3) and (resonan\$3 with frequency) and (displacement\$1)	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:13
S97	12	(reciprocat\$3 with (mass\$3 weight\$1)) and ((perpendicular\$1 ninety) with (displacement\$1 angular\$3)) and (vibrat\$3 and actuat\$3) and (resonan\$3 with frequency)	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:13
S98	14	(reciprocat\$3 with (mass\$3 weight\$1)) and ((perpendicular\$1 ninety) with (displacement\$1 angular\$3)) and (vibrat\$3 with (resonan\$3 with frequency) )	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:15
S99	0	(reciprocat\$3 with (mass\$3 weight\$1)) and ((perpendicular\$1 ninety) with (displacement\$1 angular\$3)) and (vibrat\$3 with (resonan\$3 with frequency) and sinusoidal\$3 )	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:15
S100	0	(reciprocat\$3 with (mass\$3 weight\$1)) and ((perpendicular\$1 ninety) with (displacement\$1 angular\$3)) and (vibrat\$3 with (resonan\$3 with frequency)) and (vibrat\$4 with sinusoidal\$3 )	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:16
S101	0	S98 and S85	US-PGPUB; USPAT; USOCR	OR	ON	2011/01/24 13:16

**EAST Search History (Interference)**

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S35	1459	(702/42,56,141).CCLS.	US-PGPUB; USPAT; UPAD	OR	OFF	2009/12/29 16:40
S36	0	((piezoelectric with actuat\$3) and (cycl\$3 with load\$3 with specimen\$1) and (frequenc\$3 with waveform\$1) and (root with end\$3) and (longitud\$3 with ax\$3) and (mount\$3 with rigid\$3) and (reciprocat\$3 with frequenc\$3) ).clm.	US-PGPUB; USPAT; UPAD	OR	ON	2009/12/29 16:54
S37	0	S35 and S36	US-PGPUB; USPAT; UPAD	OR	ON	2009/12/29 17:02
S38	1619	(702/188).CCLS.	US-PGPUB; USPAT; UPAD	OR	OFF	2009/12/29 17:05
S39	0	S36 and S38	US-PGPUB; USPAT; UPAD	OR	ON	2009/12/29 17:05
S54	3059	(702/42,141,56,188).CCLS.	US-PGPUB; USPAT; UPAD	OR	OFF	2009/12/29 17:12

S55	0	((reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (specimen with mov\$3 with mass) and (mass with relat\$3) and (displacement with tip\$3) and (vibrat\$3) and (load with actuat\$3 with transvers\$3)).clm.	US-PGPUB; USPAT; UPAD	OR	ON	2009/12/29 17:14
S56	0	S54 and S55	US-PGPUB; USPAT; UPAD	OR	ON	2009/12/29 17:14
S81	1522	(702/42,56,141).CCLS.	US-PGPUB; USPAT; UPAD	OR	OFF	2010/07/15 18:46
S82	0	((reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (specimen with mov\$3 with mass) and (mass with relat\$3) and (displacement with tip\$3) and (vibrat\$3) and (load with actuat\$3 with transvers\$3)).clm.	US-PGPUB; USPAT; UPAD	OR	ON	2010/07/15 18:52
S83	3205	(702/42,141,56,188).CCLS.	US-PGPUB; USPAT; UPAD	OR	OFF	2010/07/15 19:10
S84	0	S82 and S83	US-PGPUB; USPAT; UPAD	OR	ON	2010/07/15 19:11
S103	3382	(702/42,141,56,188).CCLS.	US-PGPUB; USPAT; UPAD	OR	OFF	2011/01/24 13:02
S111	2	((reciprocat\$3 with frequenc\$3) and (longitudinal with axis) and (root near end\$3) and (turbine with mov\$3 with mass))	US-PGPUB; USPAT; UPAD	OR	ON	2011/01/24 13:04

1/24/2011 1:55:57 PM

C:\Documents and Settings\phuynh1\My Documents\EAST\Workspaces\10520011\_resonance test system.wsp